

the specification, claims, abstract and the drawings and that no new matter has been added. The objections and rejections are addressed in turn.

***Specification Objections under 35 U.S.C. §132***

The subject Office Action objected to the previous amendment to the specification on the grounds that the addition of "by weight" to the paragraphs beginning on page 3, line 4, and page 10, line 9, was not supported by the original specification or otherwise. It is respectfully submitted that the specification expressly states percentages by weight and specifies mixtures by weight. For example, at page 3, the specification states that "[t]he recommended dosage is 2 to 5% of the weight of the mortar being used." Similarly, at page 16, a preferred mixture is specified by weight to "consist[] of 2.5 kg of the ... cement-based mortar, 400 grams of water, and 75 grams of accelerant." This is equivalent to 84% mortar, 13% water and 3% accelerant. Given this context, it is respectfully submitted that one skilled in the art would understand clearly that the percentages are expressed by weight not by volume. And, given this context, it would be nothing more than an exercise in prolixity to state every time a percentage is given that it is given by weight. Nonetheless, the above amendments

cancel this text from the specification to overcome the Examiner's objection.

***Claim Rejections under 35 U.S.C. §112***

The subject Office Action rejected claims 2, 4 and 22 arguing that the percentages by weight were not supported by the original specification. For the reasons set forth above regarding the objections under 35 U.S.C. §132, it is respectfully submitted that in the full context of the specification the percentages by weight were supported. Nonetheless, these claims have been amended to eliminate any reference to percentages in order to overcome this rejection and in the interest of moving this application forward.

***Claim Rejections under 35 U.S.C. §103***

The Examiner rejected all pending claims as obvious. Again, the MPEP sets forth the requirements for such a rejection:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or

suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.

MPEP 2142 (citations omitted). If the prior art fails to meet these three criteria, then the prior art likewise fails to establish a *prima facie* case of obviousness.

Claim 1, as amended, recites, among other elements, the step of:

removing an exterior portion of the mortar surface after approximately two hours so that the mortar surface has hardened sufficient to prevent removal of sub-surface, concrete-based mortar.

In rejecting this claim, the subject Office Action applies Schiffer (U.S. Patent No. 4,349,588) as allegedly analogous art. A careful review of that patent, however, demonstrates that it is directed to an entirely different problem, that it applies an entirely different solution and that, in all fairness, it teaches away from applicant's claimed invention.

Specifically, Schiffer is directed not to the problem of "forming an even surface" as recited by claim 1, but to the entirely different problem of creating uneven troughs in a mortar surface to provide a brick-like appearance. Schiffer achieves this objective by scoring and removing sub-surface mortar when it is "partially set but not dry." If a rough trowel were rubbed against a surface that could still be scored and removed in this fashion, the mortar would certainly stick to

the rough trowel and create a surface that is neither even nor resembling a brick wall. It would create a mess.

To more clearly distinguish Shiffer from applicant's invention, claim 1 has been amended to recite that the "the mortar surface has hardened sufficient to prevent removal of sub-surface, concrete-based mortar." This amendment avoids Shiffer and the mess that would result from rubbing a rough trowel against a mortar surface that is soft enough to be scored and removed. Accordingly, it is respectfully submitted that the amendment overcomes the rejection.

Claim 2, as amended, depends from claim 1 and further recites, among other elements, that:

the concrete-based mortar ha[s] ... particles greater than 1.2 millimeters in diameter.

As shown in applicant's previous response, applicant's invention removes these larger particles to obtain the needled, decorative surface. While a mere decoration is not amenable to utility patent protection, a useful method of obtaining an even, needled concrete surface certainly is.

In rejecting this express element of claim 2, the subject Office Action relies upon Nishida et al. (U.S. Patent No. 3,853,577) and Shiffer. Nishida et al. teach aggregate sizes of

75-300 microns, or in their own words "fine [aggregate] powder" and Shiffer teaches the use of "sand and/or aggregate" but is silent as to a preferred size. In evaluating the combined teaching of such references, the MPEP explains:

**PRIOR ART MUST BE CONSIDERED IN ITS ENTIRETY, INCLUDING DISCLOSURES THAT TEACH AWAY FROM THE CLAIMS**

A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention.

MPEP §2141.02. Moreover, "[a] prior art reference that 'teaches away' from the claimed invention is a significant factor to be considered in determining obviousness." MPEP §2145(X)(D)(1).

Here, one of the references expressly teaches sifting so that the particles are *three times* smaller than those claimed, and the other is silent on this particular element. Putting aside that neither of these references are directed to the same problem, in all fairness, their combined teaching is away from the claimed invention. And, at the very least, these references fail to establish a *prima facie* case of obviousness.

In addition, the combination of Shiffer and Nishida *et al.* is based not on the references themselves, but upon applicant's disclosure. Nishida *et al.* teaches small particle size because it uses a roller to reshape the concrete surface. If that surface contained large particles, for "bulk" or "strength,"

those particles would become embedded on the roller. The result would not be a smooth even surface but a rocky mess.

Moreover, claim 2 has been amended to further recite that

the step of removing the exterior portion of the mortar surface comprises removing the particles greater than 1.2 millimeters in diameter from the exterior portion of the mortar surface without removing the particles greater than 1.2 millimeters in diameter from the sub-surface portion of the mortar surface.

On this further ground it is respectfully submitted that the claim stands in condition for allowance.

Claims 3-6 depend from claim 1 or an intermediate claim and recite additional elements. Accordingly, it is respectfully submitted that these claims stand in condition for allowance.

Claim 7, as amended, recites:

allowing the resulting composition to set on the building for a period of at least two hours, wherein the resulting composition sufficiently hardens to prevent reformation and to prevent scoring lines; and

For the reasons set forth above with respect to claim 1, it is respectfully submitted that this claim stands in condition for allowance.

Claims 8-13 depend from claim 7 or an intermediate claim. Accordingly, it is respectfully submitted that these claims stand in condition for allowance.

Claim 21, as amended, recites:

removing an exterior skin of the resulting composition after the step of allowing the resulting composition to set.

For the reasons set forth above with respect to claim 1, it is respectfully submitted that this claim stands in condition for allowance.

Claims 22-23 depend from claim 21 or an intermediate claim. Accordingly, it is respectfully submitted that these claims stand in condition for allowance.

#### ***New Claims***

Claim 24 has been added to further claim applicant's invention. It recites in pertinent part that the resulting composition hardens sufficient to prevent impressions or patterns as taught by Shiffer. For this reason, it is respectfully submitted that it stands in condition for allowance.

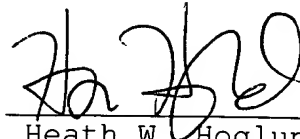
#### ***Conclusion***

For the reasons set forth above, it is respectfully submitted that the application stands in condition for allowance. The Examiner's reconsideration and favorable action are respectfully requested.

Respectfully submitted,

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## APPENDIX A

1. (Amended) An improved method of forming an even surface on a building, wherein the method is especially suited for reducing the labor requirements of applying a concrete-based mortar to the building, wherein the method comprises the steps of:

mixing a concrete-based mortar with water and a quantity of accelerant sufficient to cause the resulting composition to set in approximately two hours;

applying the concrete-based mortar to a concrete surface to form a mortar surface; and

removing an exterior portion of the mortar surface after approximately two hours so that the mortar surface has hardened sufficient to prevent removal of sub-surface, concrete-based mortar.

2. (Twice Amended) The method of claim 1, wherein the step of mixing the concrete-based mortar comprises mixing the concrete-based mortar having [by weight at least fifty-percent of] particles greater than 0.18 millimeters in diameter and [at least two-percent of] a lesser portion of particles greater than

1.2 millimeters in diameter, and wherein the step of removing the exterior portion of the mortar surface comprises removing the particles greater than 1.2 millimeters in diameter from the exterior portion of the mortar surface without removing the particles greater than 1.2 millimeters in diameter from the sub-surface portion of the mortar surface.

4. (Twice Amended) The method of claim 3, wherein the step of mixing the concrete-based mortar further comprises mixing the concrete-based mortar with the accelerant having chloride ions [in an amount of approximately twenty-five percent by weight of the accelerant].

7. (Twice Amended) A method of applying a concrete-based mortar to a building comprising the steps of:

mixing a concrete-based mortar, an accelerant and water to form a resulting composition that sets within three hours;

applying the resulting composition to an exterior of a building;

allowing the resulting composition to set on the building for a period of at least two hours, wherein the resulting

composition sufficiently hardens to prevent reformation and to prevent scoring lines; and

removing an exterior portion of the resulting composition, wherein the time from applying the resulting composition to removing the exterior portion of the resulting composition does not exceed three hours.

21. (Amended) A method of applying a concrete-based mortar to a building comprising the steps of:

mixing a concrete-based mortar, an accelerant and water to form a resulting composition that hardens in approximately three hours time or less;

applying the resulting composition to an exterior of a building;

allowing the resulting composition to harden on the building for a time sufficient to prevent reformation of the composition; and

removing an exterior [portion] skin of the [mortar surface] resulting composition after the step of allowing the resulting composition to set.

22. (Amended) The method of claim 21, wherein the step of mixing a concrete-based mortar comprises mixing the concrete-based mortar having [approximately two percent or more by weight of] particles approximately 1 millimeter or greater in diameter.

23. (Amended) The method of claim 22, wherein the step of removing an exterior [portion] skin comprises scraping a rough trowel against the [exterior portion of the mortar surface] resulting composition to remove at least a portion of the particles approximately 1 millimeter or greater in diameter from the exterior [portion of the mortar surface] skin but without removing subcutaneous mortar or particles.